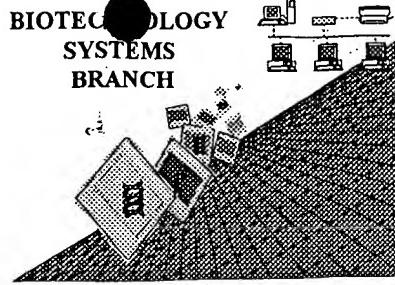


RAW SEQUENCE LISTING ERROR REPORT



HIS

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/319,156
Source: 1648
Date Processed by STIC: 7/25/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

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- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

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TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§ 1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
<http://www.uspto.gov/web/offices/pac/checker>

09/319,156

ad

Application No.: _____

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
- 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- 6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- 7. Other: _____

Applicant Must Provide:

- An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216

For CRF Submission Help, call (703) 308-4212

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1648

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/319,156

DATE: 07/25/2001
TIME: 12:42:40

Input Set : A:\es.txt
Output Set: N:\CRF3\07252001\I319156.raw

See P.5

3 <110> APPLICANT: PARANHOS-BACCALA, Glaucia
4 KOMURIAN-PRADEL, Florence
5 BEDIN, Frederic
6 SODOYER, Mireille
7 OTT, Catherine
8 MALLET, Francois
9 PERRON, Herve
10 MANDRAND, Bernard
12 <120> TITLE OF INVENTION: RETROVIRAL NUCLEIC MATERIAL AND NUCLEOTIDE FRAGMENTS, IN PARTICULAR,
13 ASSOCIATED WITH MULTIPLE SCLEROSIS AND/OR RHEUMATOID ARTHRITIS, FOR DIAGNOSTIC,
14 PROPHYLACTIC AND THERAPEUTIC USES
16 <130> FILE REFERENCE: 103514
18 <140> CURRENT APPLICATION NUMBER: US/09/319,156
19 <141> CURRENT FILING DATE: 1999-11-02
21 <150> PRIOR APPLICATION NUMBER: PCT/FR98/01460
22 <151> PRIOR FILING DATE: 1998-07-07
24 <150> PRIOR APPLICATION NUMBER: FR/97/08816
25 <151> PRIOR FILING DATE: 1997-07-07
27 <160> NUMBER OF SEQ ID NOS: 45
29 <170> SOFTWARE: PatentIn version 3.0
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32 <211> LENGTH: 34
33 <212> TYPE: DNA
34 <213> ORGANISM: MSRV
36 <400> SEQUENCE: 1
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40 <210> SEQ ID NO: 2
41 <211> LENGTH: 30
42 <212> TYPE: DNA
43 <213> ORGANISM: MSRV
45 <400> SEQUENCE: 2
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49 <210> SEQ ID NO: 3
50 <211> LENGTH: 30
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52 <213> ORGANISM: MSRV
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55 ccaatagcca gaccattata tacactaatt 30
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66 agcaggaaaa atagaatagg aaacacctaca aggacatact ttccctccct ccagatggct 120
68 agccactgag gaaggaaaa tacttcacc tgcagctaac caacagaaaat tacttaaaac 180
70 cttcaccaa accttccact taggattga tagcacccat cagatggcca aattattatt 240

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/319,156

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Input Set : A:\es.txt
Output Set: N:\CRF3\07252001\I319156.raw

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 78 <211> LENGTH: 103
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 82 <220> FEATURE:
 83 <221> NAME/KEY: misc_feature
 84 <222> LOCATION: (26)..(26)
 85 <223> OTHER INFORMATION: Xaa = any amino acid
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 91 1 5 10 15
 ✓ 93 Pro Gln Tyr Ser Ala Gly Lys Ile Glu Xaa Glu Thr Ser Gln Gly His
 94 20 25 30
 96 Thr Phe Leu Pro Ser Arg Trp Leu Ala Thr Glu Glu Gly Lys Ile Leu
 97 35 40 45
 99 Ser Pro Ala Ala Asn Gln Gln Lys Leu Leu Lys Thr Leu His Gln Thr
 100 50 55 60
 102 Phe His Leu Gly Ile Asp Ser Thr His Gln Met Ala Lys Leu Leu Phe
 103 65 70 75 80
 105 Thr Gly Pro Gly Leu Phe Lys Thr Ile Lys Lys Ile Val Arg Gly Cys
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 108 Glu Val Cys Gln Arg Asn Asn
 109 100
 111 <210> SEQ ID NO: 6
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 114 <213> ORGANISM: MSRV
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 119 caaatgttc ttcaaatttga gcaccagatg gagtccatga ctaagatcca ccgtggaccc 120
 121 ctggaccggc ctgctagccc atgctcccat gttaatgaca ttgaaggcac ccctcccgag 180
 123 gaaatctcaa ctgcacaacc cctactatgc cccaaattcag cgggaagcag ttagagcggt 240
 125 catcagccaa cctcccaac agcaattggg ttttcctgtt gagagggggg actgagagac 300
 127 aggactagct ggatttccta gccaaacgaa gaatccctaa gcctagctgg gaaggtgact 360
 129 qcatccaccc ttaaacatgg gccttgcaac ttagctcaca cccgaccaat cagagagctc 420
 131 actaaaaatgc taattaggca aaaataggag gtaaagaaat agccaatcat ctattgcctg 480
 133 agagcacagc gggagggaca aggatcggga tataaacccca ggcattcgag ccggcaacgg 540
 135 caacccccc tgggtccccct cccttgcata gggcgctctg ttttcaactct atttcactct 600
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 141 <211> LENGTH: 77
 142 <212> TYPE: PRT
 143 <213> ORGANISM: MSRV
 145 <400> SEQUENCE: 7
 147 Pro Cys Ile Phe Asn Leu Leu Val Lys Phe Val Ser Ser Arg Ile Lys
 148 1 5 10 15
 150 Thr Val Lys Leu Gln Ile Val Leu Gln Met Glu His Gln Met Glu Ser

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/319,156

DATE: 07/25/2001
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Input Set : A:\es.txt
Output Set: N:\CRF3\07252001\I319156.raw

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153	Met Thr Lys Ile His Arg Gly Pro Leu Asp Arg Pro Ala Ser Pro Cys			
154	35	40	45	
156	Ser Asp Val Asn Asp Ile Glu Gly Thr Pro Pro Glu Glu Ile Ser Thr			
157	50	55	60	
159	Ala Gln Pro Leu Leu Cys Pro Asn Ser Ala Gly Ser Ser			
160	65	70	75	
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163	<211> LENGTH: 32			
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165	<213> ORGANISM: MSRV			
167	<400> SEQUENCE: 8			
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172	<211> LENGTH: 1481			
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174	<213> ORGANISM: MSRV			
176	<400> SEQUENCE: 9			
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181	acgcggcttc ctggaaatat tgatgccccca tcataatagga gtttatctaa gggaaaactcc		180	
183	accttcactg cccacaccca tatgccccgc aactgctata actctgccac tctttgcatt		240	
185	catgcaaata ctcattattt gacaggaaa atgattaatc ctatgttgc tggaggactt		300	
187	ggagccactg tctgtggac ttacttcacc cataccagta tgtctgtatgg ggggtggatt		360	
189	caaggtcagg caagagaaaa acaagtaaag gaagcaatct cccaaactgac ccggggacat		420	
191	agcaccccta gcccctacaa aggacttagtt ctctaaaac tacatgaaac cctccgtacc		480	
193	catactcgcc tggtaggcct atttaatacc accctcaactc ggctccatga ggtctcagcc		540	
195	caaaacccta ctaactgttg gatgtgcctc cccctgcact tcaggccata catttcaatc		600	
197	cctgttccctg aacaatggaa caacttcagc acagaaaataa acaccacttc cgtttttagta		660	
199	ggacaccttg ttccaatct gaaaataacc catacctaa acctcacctg tgtaaaattt		720	
201	agcaatacta tagacacaac cagctcccaa tgcattcagg gggtaacacc tcccacacga		780	
203	atagtctgcc taccctcagg aatattttt gtctgtggta cctcagccata tcattgtttg		840	
205	aatggctctt cagaatctat gtgcttcctc tcattcttag tgcccccatt gaccatctac		900	
207	actgaacaag atttatacaa tcatgtcgta cctaagcccc acaacaaaag agtacccatt		960	
209	cttccttttg ttatcagagc aggagtgcata ggcagactag gtactggcat tggcagttac		1020	
211	acaacctcta ctcaggctta ctacaaacta tctcaagaaa taaatggta catgaaacag		1080	
213	gtcactgact ccctggcac ttgcaagat caacttaact ccctagcagc agtagtcctt		1140	
215	caaaatcgaa gagctttaga cttgctaacc gccaaaagag gggaaacctg tttatTTTA		1200	
217	ggagaagaac gctgttatta tgtaatcaa tccagaattt tcactgagaa agttaaagaa		1260	
219	attcgagatc gaatacaatg tagagcagag gagcttcaaa acaccgaacg ctggggcctc		1320	
221	ctcagccaaat ggatccctg gtttccccc ttcttaggac ctctagcagc tctaataattt		1380	
223	ttactcctct ttggaccctg tatcttaac ctccttgtt agttgtctc ttccagaatt		1440	
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230	<212> TYPE: PRT			
231	<213> ORGANISM: MSRV			
233	<220> FEATURE:			
234	<221> NAME/KEY: misc_feature			

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/319,156

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Input Set : A:\es.txt
Output Set: N:\CRF3\07252001\I319156.raw

235 <222> LOCATION: (39)..(39)
 236 <223> OTHER INFORMATION: Xaa = any amino acid
 239 <400> SEQUENCE: 10
 241 Met Ala Leu Pro Tyr His Thr Phe Leu Phe Thr Val Leu Leu Pro Pro
 242 1 5 10 15
 244 Phe Ala Leu Thr Ala Pro Pro Pro Cys Cys Cys Thr Thr Ser Ser Ser
 245 20 25 30
 247 Pro Tyr Gln Glu Phe Leu Xaa Arg Thr Arg Leu Pro Gly Asn Ile Asp
 248 35 40 45
 250 Ala Pro Ser Tyr Arg Ser Leu Ser Lys Gly Asn Ser Thr Phe Thr Ala
 251 50 55 60
 253 His Thr His Met Pro Arg Asn Cys Tyr Asn Ser Ala Thr Leu Cys Met
 254 65 70 75 80
 256 His Ala Asn Thr His Tyr Trp Thr Gly Lys Met Ile Asn Pro Ser Cys
 257 85 90 95
 259 Pro Gly Gly Leu Gly Ala Thr Val Cys Trp Thr Tyr Phe Thr His Thr
 260 100 105 110
 262 Ser Met Ser Asp Gly Gly Ile Gln Gly Gln Ala Arg Glu Lys Gln
 263 115 120 125
 265 Val Lys Glu Ala Ile Ser Gln Leu Thr Arg Gly His Ser Thr Pro Ser
 266 130 135 140
 268 Pro Tyr Lys Gly Leu Val Leu Ser Lys Leu His Glu Thr Leu Arg Thr
 269 145 150 155 160
 271 His Thr Arg Leu Val Ser Leu Phe Asn Thr Thr Leu Thr Arg Leu His
 272 165 170 175
 274 Glu Val Ser Ala Gln Asn Pro Thr Asn Cys Trp Met Cys Leu Pro Leu
 275 180 185 190
 277 His Phe Arg Pro Tyr Ile Ser Ile Pro Val Pro Glu Gln Trp Asn Asn
 278 195 200 205
 280 Phe Ser Thr Glu Ile Asn Thr Thr Ser Val Leu Val Gly Pro Leu Val
 281 210 215 220
 283 Ser Asn Leu Glu Ile Thr His Thr Ser Asn Leu Thr Cys Val Lys Phe
 284 225 230 235 240
 286 Ser Asn Thr Ile Asp Thr Thr Ser Ser Gln Cys Ile Arg Trp Val Thr
 287 245 250 255
 289 Pro Pro Thr Arg Ile Val Cys Leu Pro Ser Gly Ile Phe Phe Val Cys
 290 260 265 270
 292 Gly Thr Ser Ala Tyr His Cys Leu Asn Gly Ser Ser Glu Ser Met Cys
 293 275 280 285
 295 Phe Leu Ser Phe Leu Val Pro Pro Met Thr Ile Tyr Thr Glu Gln Asp
 296 290 295 300
 298 Leu Tyr Asn His Val Val Pro Lys Pro His Asn Lys Arg Val Pro Ile
 299 305 310 315 320
 301 Leu Pro Phe Val Ile Arg Ala Gly Val Leu Gly Arg Leu Gly Thr Gly
 302 325 330 335
 304 Ile Gly Ser Ile Thr Thr Ser Thr Gln Phe Tyr Tyr Lys Leu Ser Gln
 305 340 345 350
 307 Glu Ile Asn Gly Asp Met Glu Gln Val Thr Asp Ser Leu Val Thr Leu
 308 355 360 365

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/319,156

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Input Set : A:\es.txt
Output Set: N:\CRF3\07252001\I319156.raw

310	Gln Asp Gln Leu Asn Ser Leu Ala Ala Val Val Leu Gln Asn Arg Arg	
311	370	375 380
313	Ala Leu Asp Leu Leu Thr Ala Lys Arg Gly Gly Thr Cys Leu Phe Leu	
314	385	390 395 400
316	Gly Glu Glu Arg Cys Tyr Tyr Val Asn Gln Ser Arg Ile Val Thr Glu	
317	405	410 415
319	Lys Val Lys Glu Ile Arg Asp Arg Ile Gln Cys Arg Ala Glu Glu Leu	
320	420	425 430
322	Gln Asn Thr Glu Arg Trp Gly Leu Leu Ser Gln Trp Met Pro Trp Val	
323	435	440 445
325	Leu Pro Phe Leu Gly Pro Leu Ala Ala Leu Ile Leu Leu Leu Leu Phe	
326	450	455 460
328	Gly Pro Cys Ile Phe Asn Leu Leu Val Lys Phe Val Ser Ser Arg Ile	
329	465	470 475 480
331	Glu Ala Val Lys Leu Gln Met Val Leu Gln Met Glu Pro	
332	485	490
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335	<211> LENGTH: 32	
336	<212> TYPE: DNA	
337	<213> ORGANISM: MSRV	
339	<400> SEQUENCE: 11	
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343	<210> SEQ ID NO: 12	
344	<211> LENGTH: 1329	
345	<212> TYPE: DNA	
346	<213> ORGANISM: MSRV	
348	<220> FEATURE:	
349	<221> NAME/KEY: misc_feature	
350	<222> LOCATION: (1232)..(1232)	
351	<223> OTHER INFORMATION: n = a, g, c or t/u	
354	<400> SEQUENCE: 12	
355	tcaaaaatcg a agagctttag acttgcttaac cgccaaaaga gggggAACCT gtttattttt	60
357	aggggaaagaa tgctgttagt atgttaatca atctggaatc attactgaga aagttaaaga	120
359	aatttgagat cgaatataat gttagcaga ggaccccaa aacactgcac cctggggcct	180
361	cctcagccaa tggatcccgt gactctccc cttcttagga cctctagcag ctataatatt	240
363	tttactcctc tttggaccct gtatcttcaa cttccttgtt aagtttgtct cttccagaat	300
365	tgaagctgt aagctacaaa tagttctca aatggAACCC cagatgcagt ccattgactaa	360
367	aatctaccgt ggaccctgg accggcctgc tagactatgc tctgatgta atgacattga	420
369	agtccacccct cccgaggaaa tctcaactgc acaaccccta ctacactcca attcagtagg	480
371	aagcagttag agcaggtagtcc agccaaacctc cccaaacagta cttgggttt cttgttgaga	540
W-->	373 ggg tggactg agagacagga ctagctggat ttccctaggct gactaagaat ccc aa aggcct	600
W-->	375 an ctgggaag gtgaccgcatt ccatctttaa acatgggct tgcaacttag ctcacacccg	660
	377 accaatcaga gagctacta aatgtaat caggaaaaa caggaggtaa agcaatagcc	720
	379 aatcatctat tgcctgagag cacagcggga aggacaagga ttggatata aactcaggca	780
	381 ttcaagccag caacagcaac cccctttggg tccccccca ttgtatggg gctctgttt	840
	383 cactctattt cactctatta aatcatgcaa ctgcacttt ctggccgtg ttttttatgg	900
	385 ctcaagctga gctttgttc gccatccacc actgctgttt gccaccgtca cagacccgct	960
	387 gctgacttcc atcccttgg atccagcaga gtgtccactg tgctcctgat ccagcgaggt	1020
	389 acccattgcc actcccgatc aggctaaagg ctggcattg ttccctgcatg gctaagtgcc	1080

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/319,156

DATE: 07/25/2001
TIME: 12:42:41

Input Set : A:\es.txt
Output Set: N:\CRF3\07252001\I319156.raw

L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:375 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:433 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:1090 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40